

Claims

1 1. For use in a communication interface for communication between a
2 wireless device and the communication interface, the communication interface being
3 configured to communicate with other devices communicating with a network and
4 configured to facilitate data communication between the wireless device and other
5 devices connected to the network, a computer readable medium having stored thereon a
6 plurality of sequences of instructions, said sequences of instructions including
7 instructions that, when executed by a processor, cause said processor to perform the steps
8 of :

9 receiving an initialization packet from a wireless device;
10 establishing a communication link with the wireless device;
11 establishing another communication link between the wireless device and the
12 network; and
13 managing the transmission to the wireless device of authorized communication
14 signals sent from the computer system by:
15 receiving and analyzing signals when received; and
16 transmitting authorized signals to the wireless device according to the
17 communication protocol.

1 2. A method according to Claim 1, wherein the managing of the transmission
2 includes:

3 examining data packets transferred between a wireless device and a network
4 device;
5 determining which signals are authorized for transmission to the wireless device
6 according to a first communication protocol; and
7 if the examination of a data packet indicates that the wireless device has
8 authorized the transmission of authorized communications to the wireless device,
9 transmitting a data packet to the wireless device

10 if the examination of a data packet indicates that the wireless device has
11 authorized the transmission of authorized communications to the wireless device,
12 transmitting a data packet to the wireless device.

1 3. A method according to Claim 1, wherein the managing of the transmission
2 includes:
3 examining a data packet transferred between a wireless device and a network
4 device;
5 determining whether the data packet is authorized for transmission to the wireless
6 device according to a first communication protocol; and
7 if the examination of a data packet indicates that the wireless device has
8 authorized the transmission of particular communications to the wireless device,
9 transmitting a data packet to the wireless device;
10 if the examination of a data packet indicates that the wireless device has not
11 authorized the transmission of particular communications to the wireless device, not
12 transmitting a data packet to the wireless device.

1 4. A method according to Claim 1, wherein the managing of the transmission
2 includes:
3 examining a data packet transferred between a wireless device and a network
4 device;
5 determining whether the wireless device is configured to communicate under a
6 first protocol, wherein the first protocol dictates whether a data packet is authorized for
7 transmission to the wireless device; and
8 if the examination of a data packet indicates that the wireless device is configured
9 under the first protocol, transmitting a data packet to the wireless device;
10 if the examination of a data packet indicates that the wireless device is not
11 configured under the first protocol, not transmitting a data packet to the wireless
12 device.

1 5. For use in a communication interface for communication between a
2 wireless device and another device via the communication interface, the communication
3 interface being configured to communicate with other devices communicating with a
4 network and configured to facilitate data communication between the wireless device and
5 other devices connected to the network and to filter out certain communications from
6 reaching the wireless device, a computer readable medium having stored thereon a
7 plurality of sequences of instructions, said sequences of instructions including
8 instructions that, when executed by a processor, cause said processor to perform the steps
9 of :

10 receiving a data packet transmission between a network affiliated device and a
11 wireless device;
12 analyzing the data packet when received;
13 determining whether the data packet contents indicate whether the wireless device
14 is configured to accept session data packets from a network device;
15 if the wireless device is configured to accept session data packets from a
16 network device, transmitting session data packets to the wireless device..

1 6. A method according to Claim 5, wherein the communication interface
2 determines whether a wireless device is configured to receive Windows network
3 communications protocol by:

4 examining data packets transmitted from the wireless device to the network
5 device;
6 if the data packet does not include an indicia that may be used to identify the
7 wireless device as a Windows network compliant device, filtering Windows network
8 protocol data packets from transmission to the wireless device; and
9 if the data packet includes an indicia that may be used to identify the wireless
10 device as a Windows network compliant device, allowing Windows network protocol
11 data packets to be transmitted to the wireless device.

1 7. For use in a communication interface for communication between a
2 personal data assistant (PDA) and the communication interface, the communication

3 interface being configured to communicate with other devices communicating with the
4 internet and configured to facilitate data communication between the PDA and other
5 devices, a computer readable medium having stored thereon a plurality of sequences of
6 instructions, said sequences of instructions including instructions that, when executed by
7 a processor, cause said processor to perform the steps of :

8 receiving an initiation packet from a computer system that is intended to be
9 broadcast to devices outside the network;

10 receiving communications signals from devices outside the network that identify
11 outside devices;

12 determining which outside devices are configured as network devices by
13 analyzing the communication signals sent by such devices that are capable of
14 communication with devices associated with the network;

15 sending the broadcast initiation packet to outside devices that are identified as
16 network devices; and

17 filtering the broadcast initiation packet from outside devices that are
18 identified as PDA devices to prevent the broadcast initiation packet from being
19 transmitted to the PDA.

1 8. A communication interface for managing communication between a
2 wireless device and a network device comprising:

3 a receiver configured to receive data packets received by the communication
4 device, the receiver including a signal receiver configured to receive a signal used for
5 transmitting data over a medium and converter configured to convert the data signal into
6 a form that can be stored;

7 a transmitter configured to transmit data packets over a medium;

8 a storage device configured to store data, the storage device including a storage
9 mechanism for storing data packets received by the receiver;

10 an analyzer configured to examine data packets transmitted between a wireless
11 device and a network device; and

12 a filter mechanism configured manage data transmissions between the
13 wireless device and the network device.

1 9. A communication interface according to claim 8, wherein the analyzer
2 includes an identifier that is configured to identify a data packet sent by a particular
3 wireless device that is configured according to a first protocol, and wherein the filter
4 mechanism is configured to subsequently relay data packets that are sent by a network
5 device that are configured according to the first protocol to the particular wireless device
6 in response to the analyzer receiving a data packet sent by the particular wireless device.

1 10. A communication interface according to claim 8, wherein the analyzer is
2 configured to identify a data packet sent by a wireless device that is configured according
3 to a first protocol, and wherein the filter mechanism is configured to subsequently relay
4 data packets to the wireless device that are sent by a network device and that are
5 configured according to the first protocol.

1 11. A communication interface according to claim 8, wherein the analyzer
2 includes an identifier that is configured to identify a data packet transmitted by a wireless
3 device that indicates that the transmitting wireless device is configured according to a
4 first protocol, and wherein the filter mechanism is configured to subsequently relay data
5 packets that are sent by a network device that are configured according to the first
6 protocol only to wireless devices that have transmitted such a packet having such indicia.

1 12. A communication interface for affecting communication between a
2 wireless device and a network device comprising:
3 receiver means for receiving data packets;
4 converter means for converting the data signal into a form that can be stored;
5 transmission means for transmitting data packets over a medium;
6 storage means for storing data packets;
7 examining means for examining data packets transmitted between a wireless
8 device and a network device; and
9 filter means for filtering our data transmissions between the wireless
10 device and the network device upon a condition

1 13. A communication interface according to claim 12, wherein the examining
2 means is configured to identify a data packet configured according to a first protocol that
3 is transmitted by the wireless device, and wherein the filter means is configured to
4 subsequently relay data packets that are sent by a network device and that are configured
5 according to the first protocol to the particular wireless device in response to the
6 examining means transmitting a data packet sent by the wireless device.

1 14. A communication interface according to claim 12, wherein the examining
2 means is configured to identify a data packet sent by a wireless device that is configured
3 according to a first protocol, and wherein the filter means is configured to subsequently
4 relay data packets to the wireless device that are sent by a network device and that are
5 configured according to the first protocol.

1 15. A communication interface according to claim 12, wherein the examining
2 means is configured to identify a data packet transmitted by a wireless device that
3 indicates that the transmitting wireless device is configured according to a first protocol,
4 and wherein the filter means is configured to subsequently relay data packets that are sent
5 by a network device that are configured according to the first protocol only to wireless
6 devices that have transmitted such a packet having such indicia.

1 16. A system for communicating between a wireless device and a network
2 device comprising:
3 an electronic wireless device configured to communicate with other electronic
4 devices according to a communication protocol;
5 an electronic network device configured to communicate with other electronic
6 devices via a computer network;
7 a communication interface having a receiver configured to receive
8 data packets, the receiver including a signal receiver configured to receive a
9 signal over a transmission medium and a converter configured to convert the data
10 signal into a form that can be stored; a transmitter configured to transmit data
11 packets over a medium; a storage device configured to store data, the storage

12 device including a storage mechanism for storing data packets received by the
13 receiver; an analyzer configured to examine data packets transmitted between the
14 wireless device and the network device; and a filter mechanism configured
15 manage data transmissions between the wireless device and the network device.

1 17. A communication interface according to claim 16, wherein the analyzer
2 includes an identifier that is configured to identify a data packet sent by a particular
3 wireless device that is configured according to a first protocol, and wherein the filter
4 mechanism is configured to subsequently relay data packets that are sent by a network
5 device that are configured according to the first protocol to the particular wireless device
6 in response to the analyzer receiving a data packet sent by the particular wireless device.

1 18. A communication interface according to claim 16, wherein the analyzer is
2 configured to identify a data packet sent by a wireless device that is configured according
3 to a first protocol, and wherein the filter mechanism is configured to subsequently relay
4 data packets to the wireless device that are sent by a network device and that are
5 configured according to the first protocol.

1 19. A communication interface according to claim 16, wherein the analyzer
2 includes an identifier that is configured to identify a data packet transmitted by a wireless
3 device that indicates that the transmitting wireless device is configured according to a
4 first protocol, and wherein the filter mechanism is configured to subsequently relay data
5 packets that are sent by a network device that are configured according to the first
6 protocol only to wireless devices that have transmitted such a packet having such indicia